

Patent claims

9 Replaced by Article 34
Rec'd on 07 Jan 05

1. Screening device which features:

- 5 • a screening cover (20) which covers an electronic subassembly arranged on a printed circuit board (2), with an edge (3) which is spaced from the component side (4) of the circuit board by a gap (5),
- 10 • a contact device (6) which is arranged in the gap and establishes an electrical connection between the screening cover and a conducting contour (7) on the printed circuit board, with lugs (8) being formed on the edge of the screening cover, by which the screening cover is held on the circuit board and the contact device under elastic pretension,

characterized in that

- 15 • the contact device is embodied as an elastic sealing element (22) running around the gap which absorbs the electromagnetic waves.

2. Screening device in accordance with Claim 1, characterized in that the printed circuit board is provided with openings (10) through which the lugs (8) of the screening cover protrude on the exit side and the plastically deformed end sections (9) of the lugs grip the back of the printed circuit board (2).

3. Screening device in accordance with Claim 2, characterized in that each end section of a lug (8) is embodied as a hinged flap (11).

4. Screening device according to at least one of the previous claims, characterized in that the screening cover (20) is embodied in a uniform material and in one piece and is made of metal.
- 5 5. Screening device according to at least one of the previous claims, characterized in that the edge is embodied (3) as a right-angled fold (12) which in the assembled state of the screening cover essentially runs in parallel to the component side and each lug (8) is formed on the outside circumference and
10 is embodied offset along a wall (17) of the screening cover (20).
6. Screening device according to at least one of the previous claims, characterized in that the sealing element (22) is embodied as a flat seal (13) and is attached by an electrically conductive adhesive (14) at the edge (3) of the screening cover
15 or the component side (4).
7. Screening device according to at least one of the previous claims, characterized in that the conducting contour is formed by dome-shaped contact points (21), arranged on the component side at the pitch of the board.
- 20 8. Method in accordance with at least one of the previous claims, characterized in that the screening cover is embodied as a punched-bent part (12).

9. Screening cover in accordance with at least one of the previous claims, characterized in that the screening cover is embodied as a rectangle.
- 5 10. Screening device in accordance with at least one of the previous claims, characterized in that cutouts (15) are provided on part of the cover (16) and/or a part of the wall (17) of the screening cover (20).
- 10 11. Screening device in accordance with at least one of the previous claims, characterized in that a number of screening covers (20) are arranged on a printed circuit board (2) and the screening efficiency of these screen covers is different.
- 15 12. Screening device in accordance with at least one of the preceding claims, characterized in that the sealing element (22) is formed from a polymer material, in particular preferably from a polyamide weave which is metallically coated or surrounded by a metallic mesh.
- 20 13. Screening device in accordance with at least one of the previous claims, characterized in that the sealing element (22) is formed from an electrically conductive elastomer braided by a tinned copper-coated steel wire mesh.